E1029

ENVIRONMENTAL MANAGEMENT PLAN

FOR

ROMANIA HEALTH APL2

August 2004

ENVIRONMENTAL MANAGEMENT PLAN FOR ROMANIA HEALTH APL2

I. BACKGROUND

1.1 Introduction

The proposed project supports planning and the steps for the second phase of the Health Sector Reform Project. The strategic purpose of this program is a healthy Romania, with lower morbidity and fewer premature deaths, equitable access to health services and improved efficiency of the health system.
The five project components are the following:

1. Maternity and Neonatal Care Component
2. Emergency Care Services Component
3. Primary Health Care and Rural Medical Services Component
4. Planning and Regulation Component
5. Project Management Component

One component of the project would aim to improve hospital maternity and neonatal services in up to 152 units all over the country. This intervention is part of a broader program of improvement of maternity and neonatal services, which has been started already by the Romanian Ministry of Health. As part of this program, reorganization of maternity and neonatal units according to three levels of service provision has been initiated and guidelines have been developed regarding premises, equipment and staffing at each level.

1.2 Major Investment Components

The main physical investment components of the proposed project are:

a) rehabilitation of 152 maternities and neonatology sections all over the country
b) rehabilitation of 7 Emergency services from seven Emergency Hospitals for children

1.3 Environmental Category

The activities supported by the project comprise: a) rehabilitation of 152 maternities and 7 Emergency services which belong to Emergency Hospitals for children. The immediate impact on the environment would be limited. Potential adverse environmental impacts are summarized below and are restricted in scope and severity:

- Dust and noise due to demolition and construction;
- Disposal of construction wastes;
- Risk for inadequate handling of hazardous wastewater, waste gases and

spillages of hazardous material during operation of the building;
- Disposal of expired pharmaceuticals; and
- Risk from inadequate handling of medical waste.

These risks can be effectively anticipated in advance of project implementation and addressed by direct mitigation activities in the design, planning and construction supervision process as well as during the operation of the facilities. The project is classified under the Environmental Category B in accordance with World Bank operational policies and requires the preparation of an Environmental Management Plan (EMP).

1.4 Institutional and Implementation Arrangements

The project will be managed by a Project Management Unit (PMU) of the Ministry oh Health (MoH). The PMU is headed by a Project Director and implement through the General Department of Medical Assistance of the MOH, Institute of Mother and Child Care, and Districts Public Health Directorates. The Budget and Investment Department of the MOH will have specific responsibilities, related to the management of the counterpart funds of the loan. The PMU is also staffed by finance procurement specialists and civil works engineer with experience in Bank's procurement and disbursement procedures. To meet the management requirements for the proposed project, each Public Heath Directorate will establish a unit responsible for coordination and implementation of the planned activities under the project. A Project Steering will be established.

1.5 Institutional Structure in Environment Management and Healthcare Facilities Planning

This section briefly describes existing environmental regulation and standard relevant to the project and makes reference to institutions at the local and national levels responsible for issuing permits, licenses, and enforcing compliance of environmental standards. Additional details on the environmental regulatory framework can be found in Attachment 1.

The Ministerial Order no.219 was approved on the first of April 2002 and contains the technical norms regarding the management of the medical waste and also the methods for the data collection regarding the medical waste. Basically it is about the method for collection, wrapping, temporary storing, transportation and disposal of the medical waste. Special norms for dangerous medical wastes to prevent the contamination of the environment and the people' health are in place

In is elaborated but not yet approved by the Romanian Government "The National Strategy for the Waste Management " which includes all the responsibilities for the inclusion of the European laws in the Romanian Environmental Law. It is expected that this strategy will be approved during the next year. There are chapters regarding the environmental protection strategy, the existing situation for the

waste management, the implementation stage, strategic objectives and principles, conclusions.

Environmental Protection Law (EPL) 137/1995, other organic and major laws on various domains, International Conventions and treaties signed and ratified by Romania, different regulations with statute of governmental decision or ministerial order, National Environmental Strategy and National Environmental Action Plan (NEAP) define the legal framework of environmental protection and related activities. EPL delegates most state authority to the central environmental protection authority that is Ministry of Water and Environment Protection and its territorial affiliates (Local Environmental Protection Agency-LEPA). EPL, which approaches the EU standards, sets forth general principles of environmental policy (polluter-pays, integrated monitoring, sustainable development, NGOs and public participation, international cooperation, rehabilitation of degraded areas) and adopts the general ways for the enforcement of these principles, such as : harmonization of environmental polices and development programs, correlation between special and environmental development, compulsory use of the environmental permitting procedure for certain economic and social activities with significant environmental impacts, use of economic incentives.

Proponents of new projects have to apply for environmental agreement certificate. This might be awarded only after a serious environmental impact assessment accomplished by accredited experts and accompanied by a public debate. Potential impacts, mitigation measures and the necessary monitoring system should be outlined in this process. After project commissioning, an environmental permit is also required. This might be issued after LEPA staff verified the compliance with environmental agreement provisions. Without these certificates, the proposed activity is not allowed to proceed. Awarding of both environmental agreement and permit are proceeded by existence of other approvals (for telecommunication utilities, for natural gas network, for electric power, from the Fire Commandment) among that the Water Permit is the most important one. The management agency of each activity is obliged to set up the own internal or self-monitoring system. Parameters to be monitored are established according to the provisions included within environmental agreement and permit. Data have to be registered and made available for LEPA staff. External Monitoring performed by LEPA is oriented mostly to the recognized important polluters, due to the serious scarcity of the necessary monitoring, analysis and information equipment.

Environmental Impact Assessment (EIA). The accomplishment of full EIA on whose basis the environmental agreement would be issued, is mandatory for all activities listed in Appendix II to the Environmental Protection Law. The current regulations require that the information provided by the developer of the EA process shall include the measures envisaged in order to avoid, reduce and remedy the significant adverse effects.

Inspection and enforcement responsibility for applicable laws for healthcare facilities is the responsibility of the General Directorate of Public Health and Sanitary State Inspection from the MoH and also of the 42 County Authorities of Public Health which have special units for sanitary inspection.

A consultation process has been initiated by PMU with the authorities in charge with the environmental protection. The specialists from General Department of Public Health from the MOH and National Institute of Hygiene and Public Health have been consulted to confirm the legal frame and regulations in the field and to discuss the proposed management plan.

II ENVIRONMENTAL MANAGEMENT PLAN

2.1 Introduction

The Environmental Management Plan (EMP) has been prepared in order to integrate environmental concerns into the design and implementation of the proposed project. The EMP would support:

(a) inclusion of EMP follow-up procedures in the operational processes of the General Directorate of Public Health and Sanitary State Inspection from the MoH and also of the County Authority of Public Health;
(b) highlighting the EMP follow-up responsibility in the job description of the MoH inspectorate staff;
(c) training of designated staff from the health centers participating in the project as well as from the General Directorate of Public Health and State Inspection from the MoH and also from the County Authority in project implementation;
(d) site-specific environmental screening concerning all project supported activities for the rehabilitation of the maternities;
(e) monitoring and evaluation of mitigation measures identified in the site-specific reviews; and
(f) developing of Environmental Guidelines for ecological planning and design of healthcare facilities and for waste handling (including demolition and construction debris and medical waste).

2.2 Establishment of Environmental Expertise within the Project Implementation Structure

An Environmental Specialist would be identified within the General Directorate of Public Health and Sanitary State Inspection that would be responsible for coordination and supervision of the environmental plans and risk mitigation measures undertaken in the project. The Specialist would work in close coordination with regional project coordination staff and the PMU and would:

a) coordinate environmental training for staff, designers and local contractors;
b) disseminate existing environmental management guidelines and develop guidelines in relation to issues not covered by the existing regulations, in line with

EU standards for implementation, monitoring and evaluation of mitigation measures;

c) ensure contracting for construction and supply of equipment includes reference to appropriate guidelines and standards; and
d) conduct periodic site visits to inspect and approve plans and monitor compliance.

2.3 Site Specific Environmental Screening and Review

As a part of the EMP, all project supported activities for rehabilitation of the maternities would be subjected to a site-specific environmental screening and review process, according to provisions of the Order of the Minister of Heath no 219/2002. The Local authorities are obliged according to the law to submit an Environmental Approval for the civil works. This process would minimize site-specific environmental impacts and would use a standardized appraisal format that includes, but is not limited to, review of:

a) current environmental problems at the sites (soil erosion, water supply contamination, etc.);
b) potential environmental impacts, if any, due to the project (disposal waste from construction, medical waste handling and disposal, construction noise and dust, etc); and
c) potential requirements, if any, for temporary relocation of services for patients and location of patients and clinical staff during the construction activities.

2.4 Supervision

The environmental issues including mitigation measures would be supervised periodically by the MOH and District Public Health Directorates.

No major environmental impacts are anticipated under the proposed program given the relatively small size of most of the investments. These investments are expected to be environmentally beneficial, non of the units to be financed is expected to have any large scale, significant and/or irreversible impacts. No new structures of works of significant size are envisaged under the project. The potential negative environmental impacts are expected to be localized or able to be mitigated during the implantation stage.

On the other hand, there are environmental regulations in force in Romania, that makes control and supervision of construction works mandatory. Contracts and bill of quantities will include clauses for appropriate disposal of unacceptable construction material and disposal of construction waste. Procurement documents will specify that no environmentally unacceptable materials will be used. Bidding documents will include rehabilitation of adequate sanitary facilities, including appropriate disposal of wastewater and sewerage. The environmental management guidelines included in Attachment 2 should be provided to contractors engaged in civil works under the project, and should be made an integral part of the civil works contracts.

The EMP presented below identifies the environmental impacts and proposed mitigation measures for most of the activities under the rehabilitation of 152 unit component.

Environmental Component	Impacts	Mitigation Measures
Physical Environment		
Soils	Contamination from waste materials	Protection of soil surfaces during construction; control and daily cleaning of construction sites; provision of adequate waste disposal services.
Water	Clogging of drainage works Introduction of hazardous wastes	Special attention to drainage, proper disposal of oil and other hazardous materials; Rehabilitation of adequate sanitary facilities, including appropriate disposal of wastewater and sewerage
Air Quality	Dust during construction	Dust control by water or other means to keep dust down if problem is evident
Noise	Noise disturbance during construction or operation	Restrict construction to certain hours
Social Environment		
Aesthetic and Landscape	Risk of construction debris dumped into nearby water bodies; Disposal of construction waste: except for paint of wood, all other building materials are non hazards (lime, cement and sand plaster, concrete, glass, ceramics-electrical and sanitary, fabric insulated copper wiring, cast iron sanitary pipes, galvanized water pipes, etc)	The building site will be cleaned and all debris and waste materials will be disposed of in accordance with clauses specified in the bills of quantities. The sites for disposal of construction waste will be government- approved sites
Human Health	Construction accidents Handling of asbestos material	Specially designed systems for handling/disposal of hazardous wastes

III ENVIRONMENTAL GUIDELINES

3.1 Introduction

The Environmental Guidelines section details the specifics to be addressed in the ecological/biologic concept, design and planning of small-scale projects for the upgrading of health infrastructure. The guidelines cover the handling of construction debris generated, selection of construction materials and construction methods with limited impact on the environment, energy saving methods as well as the handling of medical and non-medical wastes under project supported activities. The guidelines are a base for training, programming, research, discussions and workshops. However, in selecting suitable construction methods and materials for the clinics, great attention should be paid to locally available traditions, skills and resources in the project sites.

3.2 The Site

The site specific screening and review should carefully assess the following issues:

- Dust and noise due to the demolition and construction;
- Dumping of construction wastes accidental spillage of machine oil, lubricants, etc;
- Risk from inadequate handling of medical waste or medical radiation hazards; and
- Potential requirements, if any, for temporary relocation of patient services, patients and clinical staff during the construction activities.

Dust from transportation and handling of construction works will be minimized by water and other means such as enclosure of construction sites. To reduce noise, construction will be restricted during certain hours. All debris, construction and wood waste will be stored within the work site. Wood waste will be stored separately and arranged to be recycled instead of disposing it. Open burning and illegal dumping will not be permitted. Proper sites for earth/clay and sand disposal will be determined and prior approval from relevant authority for disposal will be obtained. Stock piling of construction debris on site will be avoided and waste will be disposed of on a regular basis at the authorized government dumping ground. Debris chutes will be provided to transfer debris from higher floors to the ground.

The following remarks are intended to reflect the type of standards and guidelines to be incorporated in the construction and rehabilitation of hospital facilities:

3.3 Energy Efficiency, Insulation and Ventilation

Insulation should be tailored to the seasonal impacts of climate, internal thermal load, and characteristics of exposure. Vapor berries should prevent moisture intrusion in the roof insulation and outer wall cavities and using damp course.

Window location should be determined on view, ventilation, light, thermal gain, privacy control and interior space functions.

High-efficiency systems for heating domestic water (including solar systems) and for interior space heating should be selected with maintenance and long term running costs in mind. Plumbing should be coordinated to minimize plumbing and also water service to

toilets, kitchen and utility rooms. Water-saving faucets, ring mains and other devices also require consideration. All plumbing lines should preferably be copper, with waste lines in cast iron to avoid PVC outgassing. Exposed plumbing and pipe insulation should be of nontoxic material.

3.4 Filtration

Using electrostatic, activated charcoal, and high-efficiency filters can greatly improve the indoor air quality. Filters that remove particulates down to 0.3 microns are advisable for capture of microbial agents. Molecular absorbing filters can be used to remove toxic gases originating from internal and external sources. Self-actuating electrostatic filters are possible to clean, less expensive, and use no electricity. Electrical electrostatic filters should have an activated charcoal filter in order to subsequently remove ozone that can be generated by the particles on the filter. When sequential filtering for primary particles, HEPA (high efficiency particulate air filtration) is used, then the use of charcoal, potassium permanganate, or other molecular absorbers plus negative ionization at the delivery point of distribution are desirable. Smoking areas or rooms, if any, should be isolated by partitions and equipped with outside exhaust that creates a negative pressure in the space. Certain medical equipment, copy machines, as well as other reproduction equipment, should be adequately ventilated to remove their particulates and gases. Maintenance, including duct cleaning, filters cleaning and changes, and cleaning positive plate receivers and ionizing tips, should be routine and included in recurrent maintenance budgets.

3.5 Electrical Systems

Incoming cables should be located underground. Main entrance feed and panel located away from places of work and waiting is prudent in avoidance of electromagnetic fields. Ground fault wiring near any plumbing fixture is a precaution. Selecting the most energy-efficient light fixtures, lamps, appliances and equipment will reduce energy demand but can introduce undesirable electromagnetic fields. Be aware that close proximity to table, floor and desk halogen, fluorescent and other high-efficiency fixtures and lamps can cause an exposure to harmful electromagnetic fields.

3.6 Cabinetry and Wood

Nontoxic finishes are available but expensive. Selecting the least toxic finishes is advised.

3.7 Finishes

Water-based interior nontoxic, no allergenic paint for drywall or plaster surfaces is preferable to latex or oil-based paints from a respiratory standpoint. Any enamel coating for doors or other surfaces that require a more durable finish is advised to be applied away from interior spaces and be fully aired for over a month before installation. Indoor

space should not be occupied until odor and toxins of the paint or finish has been adequately aired.

3.8 Flooring

Tradition tile, marble, stone and terrazzo floors can be hard to stand and walk upon but have legendary durability. Nontoxic grouts and methods of installation should be used. Cleaning considerations should be included in the decision process.

3.9 Window Treatments

Vertical blinds provide light control, are easy to maintain, and require minimal stacking room. Horizontal blind can in combination with a white or light ceiling reflect daylight more deeply into a room. Exterior roller blinds, operable from the interior, are particularly effective in controlling solar thermal gain and interior heat loss, and give the benefit of security. Direct solar radiation can be attenuated by fabric mesh.

3.10 Exterior and Interior Colors

In climates with hot summers, reflective roofs provide a cooling advantage. When cold season occur, darker-colored exterior walls will benefit by low-angle winter solar gains but be less heated by the light angle of the summer sun. White or very light-colored ceilings and interior side walls allow for deeper reflective penetration of natural light. Doors between interior room spaces can act as reflectors. Gloss white lacquer or enamel doors in the path of incoming daylight can lighten adjoining spaces. Interior paints and finishes can affect patients and staff directly. Outdoor finishes with odorous and toxic emissions can also have an effect upon persons indoors through windows, doors and other openings.

3.11 Demolition work

Existing building elements (walls, foundations, ground cement slabs etc.) should be carefully demolished and the debris should be sorted and removed as directed by the EMP (to be determined during the preparation phase of the project). All valuable materials (doors, windows, sanitary fixtures, etc) should be carefully dismantled and transported to the storage area assigned for the purpose. Valuable materials should be recycled within the project or sold.

3.12 Selection of Construction Materials and Construction Methods

Environmentally sound goods and services should be selected. Priority should be given to products meeting standards for recognized international or national symbols. Traditionally well-tried materials and methods should be chosen before new and unknown techniques. Construction sites should be fenced off in order to prevent entry of public, and general safety measures would be imposed. Temporary inconveniences due to construction works should be minimized through planning and coordination with

contractors, neighbors and authorities. In densely populated areas, noisy or vibration generating activities should be strictly confined to the daytime.

3.13 Handling of Medical and Non-medical Wastes

The Ministerial Order no.219 was approved on the first of April 2002 and contains the technical norms regarding the management of the medical waste and also the methods for the data collection regarding the medical waste. Basically it is about the method for collection, wrapping, temporary storing, transportation and disposal of the medical waste. Special norms are in force for dangerous medical wastes to prevent the contamination of the environment and the people' health..

The segregation of waste is mandatory in all medical unit (big, medium and small) and the monitoring procedures are already developed. The waste generated in clinics and hospitals is to be categorized as follows for management purposes:

1. non-dangerous waste (the waste assimilated to domestic waste)
2. dangerous waste

The dangerous waste is classified as follows:

- anatomo-patologic waste – this includes human tissue, human pieces resulted from autopsy laboratories, dead bodies, foetus and placenta;
- infectious waste – this includes all waste which contains or was in contact with blood or viruses (syringes, needles, scalpel blades, razor blades, gloves, lines)
- Sharps – this includes hypodermic needles and syringes, scalpel blades, razor blades etc;
- chemical and pharmaceutical waste – this includes the expired vaccines, drugs, used substances resulted from laboratories

The non-dangerous waste is the waste assimilated to domestic waste. There is domestic waste non-organic – plastics, non aluminum cans, cardboard packaging etc, and domestic organic waste. The only organic waste generated in the clinics will be food waste and garden refuse.

All dangerous waste generated in clinics should be removed by specialist contractors for disposal as appropriate. It is necessary to provide a fully equipped lockable waste disposal store in the clinics for full control of the medical waste waiting for off site transportation. A universal biological hazard symbol is posted on the door of the store.

Waste generated in the clinics and hospitals is segregated as follows:

- Dangerous waste (infectious waste, sharps, chemical and pharmaceutical waste) – Yellow bags;
- Sharps – Special puncture-resistant containers; and
- Non-dangerous waste – Black bags;

For the infectious waste and sharps it will be used a special design meaning “Biological danger”. For chemical and pharmaceutical waste it will be used a special design meaning “Toxic” or “Flammable”. The sharps will be collected in special puncture-resistant containers.

The techniques for treatment of infectious waste are steam sterilization, incineration, microwave or ultraviolet heating systems, ionizing radiation or chemical treatment. The choice of technique depends on which category of infectious waste to be treated. Infectious waste which has been treated is no longer hazardous and may be mixed with and disposed of as ordinary solid waste, provided the waste does not pose other hazards that are subject to national regulations.

ATTACHMENT 1
ENVIRONMENTAL ADMINISTRATIVE, POLICY AND LEGAL FRAMEWORK

Administrative, Policy and Legal Framework

Ministry of Water and Environmental Protection (MoWEP) is the central environmental protection authority and plays also the role of Central Environmental Protection Agency (CEPA) at present. A Territorial Environmental Protection Agency as local environmental protection authority operates in each of the forty counties, in Bucharest, in Ilfov agricultural sector and in the Administration of the Danube Delta Biosphere Reserve.
Environmental Protection Law (EPL), other organic and major laws on various domains, International Conventions and Treaties signed and ratified by Romania (that have been adopted by national laws), different regulations with statute of governmental decision or ministerial order, National Environmental Strategy and National Action Plan define legal framework of environmental protection and related activities.

Environmental Protection Law (EPL)

The primary legislative act for environmental protection is the Environmental Protection Law 137/1995 (republished in 1999) that establishes the institutional framework for environmental protection, delegating most state authority to the central environmental protection authority and its territorial affiliates. Ministry of Water and Environmental Protection plays the role of central environmental protection authority in the sense of this law (art.88) and in practice so far.

The law stipulates that all of the central and local administrative authorities, juridical persons and individuals are responsible for environment protection (art.6). General responsibilities, duties and liabilities incumbent upon the environmental protection authorities, on other central and local authorities and ministries such as Health, National Defense, Research and Technology, National Education, Transport and Tourism, are also set up (art.65-67).

The EPL sets forth general principles of environmental policy (among which the polluter-pays, integrated monitoring, sustainable development, NGOs and public participation, international cooperation, rehabilitation of degraded areas (art.3)), and adopts the general ways for the enforcement of these principles, such as: harmonization of environmental policies and development programs, correlation between spatial and environmental development, compulsory use of the environmental permitting procedure utilizing both construction and operating permits for certain economic and social activities with significant environmental impacts, use of economic incentives (art.4).

Chapter II is dedicated to the framework regulation of the activities with environmental impacts, permitting procedure itself with provisions for Environmental Impact Assessment process, environmental audit and compliance schedule (Section 1);

regulation regime in case of dangerous substances, hazardous and solid waste (Section 2), chemical fertilizers and pesticides (Section 3), radiation and nuclear safety (Section 4).

Chapter III contains sections addressing specific areas of environmental and natural resource protection that include: water and aquatic ecosystem; atmospheric pollution; soil, subsoil and terrestrial ecosystems; protected areas and national monuments, human settlements. The Law provides policy guidance and some basic legal principles in each of the above-mentioned areas but also contemplates further legislation and/or regulation in many of them.

Other Environmental and related Legislation and International Conventions and Treaties

A certain number of organic laws, such as Water Law (Law 107/1996), forestry Code (law 26/1996), Nuclear Safety Code, Game Protection and Hunting Code (Law 103/1996) and the major Law on Environmental Investment Fund (Law 73/2000), have been enacted following the Environmental Protection Law. Other laws pertaining to the domains on the list in art.88 of EPL, such as solid waste, protected natural areas, air protection and toxic substances are now in different stages of draft development and review.

A large number of governmental Decisions and Ministerial Orders (MO) related both to Local Environmental Protection and other laws as well as to domains not yet regulated by laws have been issued. There are also numerous international conventions signed or ratified by Romania related to environmental protection.

National Environmental Strategy; National Environmental Action Plan; National Plan for Adoption of Acquis Communautaire

National Environmental Strategy was firs prepared and released in 1995. This was updated in 1999. The National Environmental Action Plan (NEAP) was prepared in 1995 providing the integration of environmental policies within the other sector policies (industry, agriculture, transport, physical planning and health) as well as the process to be followed for project selection, analysis and implementation.

According to the National Plan for Integration in the European Community, Program for adoption of the Acquis Communautaire (PAAC) was set up. NEAP was updated in 1998 in compliance with PAAC and updated again in 1999.

Two stages were developed in 1999 as part of the PAAC, one for the approximation of IPPC EU Directive and other for the Directives related to Air quality and Climate change issues. The approximation strategy for water quality sector was carried out in 2000.
The process is going on for preparing the approximation strategies for horizontal legislation and waste management.

Environmental Assessment and Spatial Planning

The so-called Strategic Environmental Assessment (SEA) is not institutionalized in Romania for any superior phases of the decision making process, i.e. policy, plan and program. Only in case of special planning activity this process is mandatory but under the same EIA name.

The special planning covers usually a time period of 5-10 years and is finalized under the form of some documents generically named GUP for general urban plan or TDP in case of territory development plan. While the GUP has to be realized for each urban or rural locality, i.e. town city or commune, the TDP is achieved for a larger area that could cover one or more localities and the adjacent territory. A TDP might be developed for the administrative territory of a municipality that may include the municipality itself and some neighbor communes, for one county (County Spatial Planning or CSP), for a region or zone covering parts of two or more counties (Zone Spatial Planning or ZSPO and for the entire county Spatial Planning of the National territory or SPNT).
Although Ministerial Order 187/1999 provides that is necessary to ensure the sustainable development principles and requirements, the procedures for carrying out this process are not very well defined. Anyway the GUP or TDP developer must cooperate with the Ministry of Water and Environment Protection specialized departments and Local Environmental Protection Agency(LEPA) units and with the other specialized institutions under MoWEP coordination.
An environmental agreement mandatory for the land use planning documentation endorsement should be issued following the EIA process. The same Ministerial Order 187/1999 specifies that an EIS should not be required.

Environmental Permitting Procedure for New Investments

Out of the EU environmental legislation that has prior to accession in European structures, the national legal provisions regarding the environmental impact assessment process for the new projects now reach the highest level of approximation. These provisions comprised within Environmental Protection Law 137/1995, Ministerial Order 125/1995 of MoWEP that refers to *permitting procedure for economic and social activities having an environmental impact and MO278/1996 of MoWEP (re: accreditation for EIA).*

EPL Related Provisions

Environmental Protection Law sets forth the general environmental permitting requirements for the new projects promotions. It stipulates that:

i) the new investment (projects), the investments for modifications of the existing activities and the activities (projects) listed under the Appendix II of the Law require an environmental agreement (art.8);
ii) the environmental agreement should be issued by Central Environmental Protection Agency (CEPA) or LEPA in accordance with the competence stated in Appendix I of the Law, prior to commencing construction; the competence in case of the projects located in more than one counties;

iii) the new activities that do not involve construction and erection works'exempting those listed in Appendix II of the law item 8.g) that do not require the environmental agreement 9art.*);
iv) CEPA would carry out the specific permitting procedure (art.9);
v) The validity of the environmental permit is 5 years (art.9);
vi) The environmental permit will not be released if any project alternative does not provide mitigation measures for the environmental impacts as against the standards and regulations in force (art.9);
vii) The environmental impact assessment procedure comprises the preliminary, the actual and the review and validation stages (art.11);
viii) LEPA organizes and decides upon the applicability of the procedure stages (art.11);
ix) Appendix II contains the "List" of the activities subject to the environmental impact assessment procedure for the releasing of the environmental agreement.

MO 125/1996 Related Provisions

Following the EPL provision mentioned under item iii) MoWEP issued MO 125/1996 that comprises the detailed permitting procedure.

The order provides that:

i) Environmental impact study (EIS) is required for any facility or activity likely to have a significant environmental impact, through its nature, size or location (art.3.3 1);
ii) Any activity listed under Appendix II of EPL is likely to have a significant environmental impact, through its nature, size or location (art.3.3.2)
iii) For any other unknown activity that is not listed in appendix II, the environmental authority competent to release the environmental agreement would use a set of criteria to judge if the activity is likely to have a significant environmental impact. These criteria will include the characteristics of each activity or facility, its location and the characteristics of the potential impact taking into account the magnitude and complexity, probability, duration, frequency and reversibility as well as the trans-boundary effects of the impact (art3 3.3)
iv) Project proponent or its representative applies for the environmental agreement (art.4.1) no matter the source of funding and pays the required fee
v) Application for the environmental agreement is addressed to LEPA operating in the county where project is located (art.4.1)
vi) When project area covers parts of two or more counties, an application should be addressed to LEPA in each county; MoWEP has the competence for environmental agreement awarding in this case (art.4.1)
vii) LEPA decides if EIS should be required or not (art.4.2)

viii) Procedure for environmental agreement release consists in some steps; a sequence of these steps is imagined and presented for the situations if the EIS is required (art.4.3) and if not (art. 4.4)

ix) In case a full EIS is required these steps include: the screening performed by LEPA and a committee of Technical Analysis (CAT) to determine the main aspects to be studied in the EIS, decision of a preliminary EIS necessity, EIS review performed also by LEPA, public debate, decision if the environmental agreement should be released or not. Procedure for environmental agreement is addressed to LEPA operating in the county where project is located (art.4.1)

x) EIS should be carried out only by specialized units (companies or individuals) certified according to qualifications criteria stated through CEPA order (art.9.2)

xi) Proponent pays for the EIS

xii) Application file should contain all approvals issued by: National Company, Romanian Waters (NCRW), Fire Commandment, sanitary, National Agency of roads, ROMTELECOM (for telecommunication utilities), DISTRIGAZ (for natural gas network) CONEL (for electric power), Local Inspectorate for Construction Safety.

Environmental Permitting for New Investment Commissioning

After completion of a new investment, it is mandatory for the owner to obtain an environmental permit. The general frame of the permitting procedure is described also within MO 125/1996.

It is compulsory for LEPA staff to carry out an inspection aimed to verify the compliance with environmental agreement provisions. Sometimes an environmental audit is required by LEPA in order to issue the permit. From case to case, this audit includes measurements, sampling and analysis.

When the findings show that the provisions included in the environmental agreement are not respected, the environmental permit is issued with compliance program for a limited period of time.

The environment permit is not permanent and its renewal depends on the results of periodical controls.

The environmental permit is proposed to be an integrated one and to include also the provisions regarding water qualitative management issued by NCRW .

Water Approval and Water Permit

MO 699/1999 of MoWEP approving Procedure and competence for Water approval and water permit issuing provides the following issues:

i) According to Water Law (WL), during the design stage, for any project regarding either a construction on a water body (further named a non-

consuming water user) or a social-economic activity that user water resources in sense of water abstraction or wastewater discharge (further named a consuming water user) the proponent is obliged to require and obtain a technical-juridical act named *water approval*.

ii) This act is mandatory both to obtain investment funds from state and local budget and to carry out the new investment project related to water bodies.

iii) As concerning any water management issue such as flood danger in the project location zone, general operation rules of water reservoirs, different technical solutions, relation with the existing or planned to be water reservoirs or water diversions, water source quality, conditions for wastewater discharge into natural water receives, and so on, the proponent should require a technical consultancy from general Directorate of Waters within MoWEP or/and from NCRW(art.4)

iv) Proponent should pay for technical consultancy (art.5)

v) LEPAs have the competence to issue the water approval act on the basis of a Technical Specialized Report (TSR) carried out by NCRW or its local branches (art.25-1)

vi) In case of a project covering the territory of two or more counties, water approval is issued by LEPA in the county where the proponent headquarters is (art.25-1)

vii) The TSR signer is fully responsible of its content (art.25-3)

viii) According to Annex 1b, Annex 1c, and Art.11, the water approval is compulsory for projects of the following type, among others: drinking water supply system for more than 10l/s debit, water supply system for less than 10l/s in rural area not provided with wastewater treatment facilities or septic tanks, wastewater treatment facility, bridge (as part of a road project), pipes and electrical lines that cross a water body, urban and industrial waste deposits.

ix) Water approval should have lost its validity after two years from the issuing date if the construction works had not been started yet (art.15)

x) Proponent is fully responsible for the accuracy of any data information in the water approval application file.

xi) Application file should include any previous accepts, approvals, agreements related to the project.

xii) Water approval should be required for the project feasibility study, on the basis of a technical document. This technical document, whose content is subject to provisions of MO 277/1997 of MoWEP, should be carried out by taking into account the specialized studies with respect to hydrology, meteorology, management of water quality and quantity as well as environmental impact issues. According to WL, these studies should be performed by public/private institutions or companies accredited by MoWEP (art.22)

xiii) Mo 965/1998 of MoWEP requires any institution or company that carries out designs or hydro-technical works to be accredited by a specialized commission working within MoWEP; the accreditation certificate is issued on different domains such as : water resources management, works for river

course adjustment, water supply systems for industrial and urban users including here water supply network and waste water treatment facility, and so on, when being accredited, one mandatory condition for such a company is to include at least one expert and one design verifier certified in their turn by MoWEP among its specialized staff.

xiv) Owner of a new project (of the type described in par.I0 is obliged to require and obtain a technical-juridical act named Water permit prior to the commissioning of the project activity (art.8)

xv) Water permit is compulsory for projects of the same type as in case of water approval (art.40)

xvi) LEPAs have the competence to issue the water permit for consuming water users (art.52)

xvii) NCRW or its local branches have the competence to issue the water permit for non-consuming water users (art.54)

xviii) Application file for water permit should contain water approval and compliance schedule among other documents

xix) Any application file should be submitted to the local branch of NCRW active on the territory where the water user is located

xx) NCRW specialized staff should carry out the technical specialized report on the basis of the site technical visit findings

Monitoring System

Two independent environmental monitoring systems are usually in place for any social and economic activity. A third one, applicable to consuming water users and operated by NCRW through its local branches, has the main goal to verify the compliance with water approval and water permit

Internal or self-monitoring system

The management company of each activity is obliged to set up this system. Parameters to be monitored are established according to the provisions included within environmental agreement and permit. A service should be negotiated with accredited laboratories for sampling and data analysis. Data have to be registered and made available for LEPA staff.

The Ministerial Order no.219/2002

This MO was published in the Official Monitor no.386/2002 and contains the technical norms regarding the management of the medical waste and also the methods for the data collection regarding the medical waste. Basically it is about the method for collection, wrapping, temporary storing, transportation and disposal of the medical waste.

The National Strategy for the Waste Management

This strategy it is a draft which should be approved during the next year. It includes all the responsibilities for the inclusion of the European laws in the Romanian Environmental Law. There are chapters regarding the environmental protection strategy, the existing situation for the waste management, the implementation stage, strategic objectives and principles, conclusions.

ATTACHMENT II

ENVIRONMENTAL GUIDELINES FOR CIVIL WORK CONTRACTS

Contractors will be obliged to apply environmentally sound construction standards and procedures. All civil works contracts will have the following environment-protecting provisions:

- Take measures and precautions to avoid adverse environmental impacts, nuisance or disturbances arising from the execution of the works. This shall be done by avoidance or suppression whenever possible rather than abatement or mitigation of the impact once generated.
- Comply with all national and local environmental laws and regulation. Nominate staff to be responsible for implementation of environmental actions and to receive guidance and instructions from the engineer or environmental authorities.
- Minimize dust emissions to avoid or minimize adverse impacts on air quality.
- Maintain foot and vehicular traffic flows and public access to neighboring sites and facilities. Provide markets, lights and temporary connections by bypasses for safety and convenience.
- Prevent or minimize vibration and noise from vehicles, equipment and blasting operations.
- Minimize disturbance to and restore vegetation where it is disturbed as a consequence of the works.
- Protect surface and groundwater and soil quality from pollution. Appropriately collect and dispose of water material.